

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/510,506
Source: PCT
Date Processed by STIC: 10/25/2005

ENTERED

21 MAR 2005



PCT

RAW SEQUENCE LISTING

DATE: 10/25/2005

PATENT APPLICATION: US/10/510,506

TIME: 11:58:02

Input Set : A:\US10510506-seq list.txt

Output Set: N:\CRF4\10252005\J510506.raw

```

3 <110> APPLICANT: Evotec NeuroSciences GmbH
5 <120> TITLE OF INVENTION: Diagnostic and therapeutic use of Vault polynucleotides
6   and proteins for neurodegenerative diseases.
8 <130> FILE REFERENCE: P67785US1
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/510,506
C--> 11 <141> CURRENT FILING DATE: 2004-10-07
13 <150> PRIOR APPLICATION NUMBER: 02007820.0
14 <151> PRIOR FILING DATE: 2002-04-08
16 <150> PRIOR APPLICATION NUMBER: US 60/370,214
17 <151> PRIOR FILING DATE: 2002-04-08
19 <160> NUMBER OF SEQ ID NOS: 14
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 35
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence: ADPRTL1 cDNA
30   fragment
32 <400> SEQUENCE: 1
33 aatctaggaa tattccctgg gcttttgagg caatc
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 1724
38 <212> TYPE: PRT
39 <213> ORGANISM: Homo sapiens
41 <400> SEQUENCE: 2
42 Met Val Met Gly Ile Phe Ala Asn Cys Ile Phe Cys Leu Lys Val Lys
43   1           5           10           15
45 Tyr Leu Pro Gln Gln Gln Lys Lys Lys Leu Gln Thr Asp Ile Lys Glu
46   20           25           30
48 Asn Gly Gly Lys Phe Ser Phe Ser Leu Asn Pro Gln Cys Thr His Ile
49   35           40           45
51 Ile Leu Asp Asn Ala Asp Val Leu Ser Gln Tyr Gln Leu Asn Ser Ile
52   50           55           60
54 Gln Lys Asn His Val His Ile Ala Asn Pro Asp Phe Ile Trp Lys Ser
55   65           70           75           80
57 Ile Arg Glu Lys Arg Leu Leu Asp Val Lys Asn Tyr Asp Pro Tyr Lys
58   85           90           95
60 Pro Leu Asp Ile Thr Pro Pro Pro Asp Gln Lys Ala Ser Ser Ser Glu
61   100          105          110
63 Val Lys Thr Glu Gly Leu Cys Pro Asp Ser Ala Thr Glu Glu Glu Asp
64   115          120          125
66 Thr Val Glu Leu Thr Glu Phe Gly Met Gln Asn Val Glu Ile Pro His

```

RAW SEQUENCE LISTING

DATE: 10/25/2005

PATENT APPLICATION: US/10/510,506

TIME: 11:58:02

Input Set : A:\US10510506-seq list.txt

Output Set: N:\CRF4\10252005\J510506.raw

```

67      130      135      140
69 Leu Pro Gln Asp Phe Glu Val Ala Lys Tyr Asn Thr Leu Glu Lys Val
70 145      150      155      160
72 Gly Met Glu Gly Gly Gln Glu Ala Val Val Val Glu Leu Gln Cys Ser
73      165      170      175
75 Arg Asp Ser Arg Asp Cys Pro Phe Leu Ile Ser Ser His Phe Leu Leu
76      180      185      190
78 Asp Asp Gly Met Glu Thr Arg Arg Gln Phe Ala Ile Lys Lys Thr Ser
79      195      200      205
81 Glu Asp Ala Ser Glu Tyr Phe Glu Asn Tyr Ile Glu Glu Leu Lys Lys
82      210      215      220
84 Gln Gly Phe Leu Leu Arg Glu His Phe Thr Pro Glu Ala Thr Gln Leu
85 225      230      235      240
87 Ala Ser Glu Gln Leu Gln Ala Leu Leu Leu Glu Glu Val Met Asn Ser
88      245      250      255
90 Ser Thr Leu Ser Gln Glu Val Ser Asp Leu Val Glu Met Ile Trp Ala
91      260      265      270
93 Glu Ala Leu Gly His Leu Glu His Met Leu Leu Lys Pro Val Asn Arg
94      275      280      285
96 Ile Ser Leu Asn Asp Val Ser Lys Ala Glu Gly Ile Leu Leu Leu Val
97      290      295      300
99 Lys Ala Ala Leu Lys Asn Gly Glu Thr Ala Glu Gln Leu Gln Lys Met
100 305      310      315      320
102 Met Thr Glu Phe Tyr Arg Leu Ile Pro His Lys Gly Thr Met Pro Lys
103      325      330      335
105 Glu Val Asn Leu Gly Leu Leu Ala Lys Lys Ala Asp Leu Cys Gln Leu
106      340      345      350
108 Ile Arg Asp Met Val Asn Val Cys Glu Thr Asn Leu Ser Lys Pro Asn
109      355      360      365
111 Pro Pro Ser Leu Ala Lys Tyr Arg Ala Leu Arg Cys Lys Ile Glu His
112      370      375      380
114 Val Glu Gln Asn Thr Glu Glu Phe Leu Arg Val Arg Lys Glu Val Leu
115 385      390      395      400
117 Gln Asn His His Ser Lys Ser Pro Val Asp Val Leu Gln Ile Phe Arg
118      405      410      415
120 Val Gly Arg Val Asn Glu Thr Thr Glu Phe Leu Ser Lys Leu Gly Asn
121      420      425      430
123 Val Arg Pro Leu Leu His Gly Ser Pro Val Gln Asn Ile Val Gly Ile
124      435      440      445
126 Leu Cys Arg Gly Leu Leu Leu Pro Lys Val Val Glu Asp Arg Gly Val
127      450      455      460
129 Gln Arg Thr Asp Val Gly Asn Leu Gly Ser Gly Ile Tyr Phe Ser Asp
130 465      470      475      480
132 Ser Leu Ser Thr Ser Ile Lys Tyr Ser His Pro Gly Glu Thr Asp Gly
133      485      490      495
135 Thr Arg Leu Leu Leu Ile Cys Asp Val Ala Leu Gly Lys Cys Met Asp
136      500      505      510
138 Leu His Glu Lys Asp Phe Ser Leu Thr Glu Ala Pro Pro Gly Tyr Asp
139      515      520      525

```

RAW SEQUENCE LISTING

DATE: 10/25/2005

PATENT APPLICATION: US/10/510,506

TIME: 11:58:02

Input Set : A:\US10510506-seq list.txt

Output Set: N:\CRF4\10252005\J510506.raw

```

141 Ser Val His Gly Val Ser Gln Thr Ala Ser Val Thr Thr Asp Phe Glu
142      530                      535                      540
144 Asp Asp Glu Phe Val Val Tyr Lys Thr Asn Gln Val Lys Met Lys Tyr
145 545                      550                      555                      560
147 Ile Ile Lys Phe Ser Met Pro Gly Asp Gln Ile Lys Asp Phe His Pro
148      565                      570                      575
150 Ser Asp His Thr Glu Leu Glu Glu Tyr Arg Pro Glu Phe Ser Asn Phe
151      580                      585                      590
153 Ser Lys Val Glu Asp Tyr Gln Leu Pro Asp Ala Lys Thr Ser Ser Ser
154      595                      600                      605
156 Thr Lys Ala Gly Leu Gln Asp Ala Ser Gly Asn Leu Val Pro Leu Glu
157      610                      615                      620
159 Asp Val His Ile Lys Gly Arg Ile Ile Asp Thr Val Ala Gln Val Ile
160 625                      630                      635                      640
162 Val Phe Gln Thr Tyr Thr Asn Lys Ser His Val Pro Ile Glu Ala Lys
163      645                      650                      655
165 Tyr Ile Phe Pro Leu Asp Asp Lys Ala Ala Val Cys Gly Phe Glu Ala
166      660                      665                      670
168 Phe Ile Asn Gly Lys His Ile Val Gly Glu Ile Lys Glu Lys Glu Glu
169      675                      680                      685
171 Ala Gln Gln Glu Tyr Leu Glu Ala Val Thr Gln Gly His Gly Ala Tyr
172      690                      695                      700
174 Leu Met Ser Gln Asp Ala Pro Asp Val Phe Thr Val Ser Val Gly Asn
175 705                      710                      715                      720
177 Leu Pro Pro Lys Ala Lys Val Leu Ile Lys Ile Thr Tyr Ile Thr Glu
178      725                      730                      735
180 Leu Ser Ile Leu Gly Thr Val Gly Val Phe Phe Met Pro Ala Thr Val
181      740                      745                      750
183 Ala Pro Trp Gln Gln Asp Lys Ala Leu Asn Glu Asn Leu Gln Asp Thr
184      755                      760                      765
186 Val Glu Lys Ile Cys Ile Lys Glu Ile Gly Thr Lys Gln Ser Phe Ser
187      770                      775                      780
189 Leu Thr Met Ser Ile Glu Met Pro Tyr Val Ile Glu Phe Ile Phe Ser
190 785                      790                      795                      800
192 Asp Thr His Glu Leu Lys Gln Lys Arg Thr Asp Cys Lys Ala Val Ile
193      805                      810                      815
195 Ser Thr Met Glu Gly Ser Ser Leu Asp Ser Ser Gly Phe Ser Leu His
196      820                      825                      830
198 Ile Gly Leu Ser Ala Ala Tyr Leu Pro Arg Met Trp Val Glu Lys His
199      835                      840                      845
201 Pro Glu Lys Glu Ser Glu Ala Cys Met Leu Val Phe Gln Pro Asp Leu
202      850                      855                      860
204 Asp Val Asp Leu Pro Asp Leu Ala Ser Glu Ser Glu Val Ile Ile Cys
205 865                      870                      875                      880
207 Leu Asp Cys Ser Ser Ser Met Glu Gly Val Thr Phe Leu Gln Ala Lys
208      885                      890                      895
210 Gln Ile Ala Leu His Ala Leu Ser Leu Val Gly Glu Lys Gln Lys Val
211      900                      905                      910
213 Asn Ile Ile Gln Phe Gly Thr Gly Tyr Lys Glu Leu Phe Ser Tyr Pro

```

RAW SEQUENCE LISTING

DATE: 10/25/2005

PATENT APPLICATION: US/10/510,506

TIME: 11:58:02

Input Set : A:\US10510506-seq list.txt

Output Set: N:\CRF4\10252005\J510506.raw

```

214          915          920          925
216 Lys His Ile Thr Ser Asn Thr Ala Ala Ala Glu Phe Ile Met Ser Ala
217          930          935          940
219 Thr Pro Thr Met Gly Asn Thr Asp Phe Trp Lys Thr Leu Arg Tyr Leu
220 945          950          955          960
222 Ser Leu Leu Tyr Pro Ala Arg Gly Ser Arg Asn Ile Leu Leu Val Ser
223          965          970          975
225 Asp Gly His Leu Gln Asp Glu Ser Leu Thr Leu Gln Leu Val Lys Arg
226          980          985          990
228 Ser Arg Pro His Thr Arg Leu Phe Ala Cys Gly Ile Gly Ser Thr Ala
229          995          1000          1005
231 Asn Arg His Val Leu Arg Ile Leu Ser Gln Cys Gly Ala Gly Val Phe
232 1010          1015          1020
234 Glu Tyr Phe Asn Ala Lys Ser Lys His Ser Trp Arg Lys Gln Ile Glu
235 1025          1030          1035          1040
237 Asp Gln Met Thr Arg Leu Cys Ser Pro Ser Cys His Ser Val Ser Val
238          1045          1050          1055
240 Lys Trp Gln Gln Leu Asn Pro Asp Ala Pro Glu Ala Leu Gln Ala Pro
241          1060          1065          1070
243 Ala Gln Val Pro Ser Leu Phe Arg Asn Asp Arg Leu Leu Val Tyr Gly
244          1075          1080          1085
246 Phe Ile Pro His Cys Thr Gln Ala Thr Leu Cys Ala Leu Ile Gln Glu
247 1090          1095          1100
249 Lys Glu Phe Cys Thr Met Val Ser Thr Thr Glu Leu Gln Lys Thr Thr
250 1105          1110          1115          1120
252 Gly Thr Met Ile His Lys Leu Ala Ala Arg Ala Leu Ile Arg Asp Tyr
253          1125          1130          1135
255 Glu Asp Gly Ile Leu His Glu Asn Glu Thr Ser His Glu Met Lys Lys
256          1140          1145          1150
258 Gln Thr Leu Lys Ser Leu Ile Ile Lys Leu Ser Lys Glu Asn Ser Leu
259          1155          1160          1165
261 Ile Thr Gln Phe Thr Ser Phe Val Ala Val Glu Lys Arg Asp Glu Asn
262          1170          1175          1180
264 Glu Ser Pro Phe Pro Asp Ile Pro Lys Val Ser Glu Leu Ile Ala Lys
265 1185          1190          1195          1200
267 Glu Asp Val Asp Phe Leu Pro Tyr Met Ser Trp Gln Gly Glu Pro Gln
268          1205          1210          1215
270 Glu Ala Val Arg Asn Gln Ser Leu Leu Ala Ser Ser Glu Trp Pro Glu
271          1220          1225          1230
273 Leu Arg Leu Ser Lys Arg Lys His Arg Lys Ile Pro Phe Ser Lys Arg
274          1235          1240          1245
276 Lys Met Glu Leu Ser Gln Pro Glu Val Ser Glu Asp Phe Glu Glu Asp
277          1250          1255          1260
279 Gly Leu Gly Val Leu Pro Ala Phe Thr Ser Asn Leu Glu Arg Gly Gly
280 1265          1270          1275          1280
282 Val Glu Lys Leu Leu Asp Leu Ser Trp Thr Glu Ser Cys Lys Pro Thr
283          1285          1290          1295
285 Ala Thr Glu Pro Leu Phe Lys Lys Val Ser Pro Trp Glu Thr Ser Thr
286          1300          1305          1310

```

RAW SEQUENCE LISTING

DATE: 10/25/2005

PATENT APPLICATION: US/10/510,506

TIME: 11:58:02

Input Set : A:\US10510506-seq list.txt

Output Set: N:\CRF4\10252005\J510506.raw

```

288 Ser Ser Phe Phe Pro Ile Leu Ala Pro Ala Val Gly Ser Tyr Leu Thr
289      1315      1320      1325
291 Pro Thr Thr Arg Ala His Ser Pro Ala Ser Leu Ser Phe Ala Ser Tyr
292      1330      1335      1340
294 Arg Gln Val Ala Ser Phe Gly Ser Ala Ala Pro Pro Arg Gln Phe Asp
295 1345      1350      1355      1360
297 Ala Ser Gln Phe Ser Gln Gly Pro Val Pro Gly Thr Cys Ala Asp Trp
298      1365      1370      1375
300 Ile Pro Gln Ser Ala Ser Cys Pro Thr Gly Pro Pro Gln Asn Pro Pro
301      1380      1385      1390
303 Ser Ala Pro Tyr Cys Gly Ile Val Phe Ser Gly Ser Ser Leu Ser Ser
304      1395      1400      1405
306 Ala Gln Ser Ala Pro Leu Gln His Pro Gly Gly Phe Thr Thr Arg Pro
307      1410      1415      1420
309 Ser Ala Gly Thr Phe Pro Glu Leu Asp Ser Pro Gln Leu His Phe Ser
310 1425      1430      1435      1440
312 Leu Pro Thr Asp Pro Asp Pro Ile Arg Gly Phe Gly Ser Tyr His Pro
313      1445      1450      1455
315 Ser Ala Tyr Ser Pro Phe His Phe Gln Pro Ser Ala Ala Ser Leu Thr
316      1460      1465      1470
318 Ala Asn Leu Arg Leu Pro Met Ala Ser Ala Leu Pro Glu Ala Leu Cys
319      1475      1480      1485
321 Ser Gln Ser Arg Thr Thr Pro Val Asp Leu Cys Leu Leu Glu Glu Ser
322      1490      1495      1500
324 Val Gly Ser Leu Glu Gly Ser Arg Cys Pro Val Phe Ala Phe Gln Ser
325 1505      1510      1515      1520
327 Ser Asp Thr Glu Ser Asp Glu Leu Ser Glu Val Leu Gln Asp Ser Cys
328      1525      1530      1535
330 Phe Leu Gln Ile Lys Cys Asp Thr Lys Asp Asp Ser Ile Pro Cys Phe
331      1540      1545      1550
333 Leu Glu Val Lys Glu Glu Asp Glu Ile Val Cys Thr Gln His Trp Gln
334      1555      1560      1565
336 Asp Ala Val Pro Trp Thr Glu Leu Leu Ser Leu Gln Thr Glu Asp Gly
337      1570      1575      1580
339 Phe Trp Lys Leu Thr Pro Glu Leu Gly Leu Ile Leu Asn Leu Asn Thr
340 1585      1590      1595      1600
342 Asn Gly Leu His Ser Phe Leu Lys Gln Lys Gly Ile Gln Ser Leu Gly
343      1605      1610      1615
345 Val Lys Gly Arg Glu Cys Leu Leu Asp Leu Ile Ala Thr Met Leu Val
346      1620      1625      1630
348 Leu Gln Phe Ile Arg Thr Arg Leu Glu Lys Glu Gly Ile Val Phe Lys
349      1635      1640      1645
351 Ser Leu Met Lys Met Asp Asp Pro Ser Ile Ser Arg Asn Ile Pro Trp
352      1650      1655      1660
354 Ala Phe Glu Ala Ile Lys Gln Ala Ser Glu Trp Val Arg Arg Thr Glu
355 1665      1670      1675      1680
357 Gly Gln Tyr Pro Ser Ile Cys Pro Arg Leu Glu Leu Gly Asn Asp Trp
358      1685      1690      1695
360 Asp Ser Ala Thr Lys Gln Leu Leu Gly Leu Gln Pro Ile Ser Thr Val

```

VERIFICATION SUMMARY

DATE: 10/25/2005

PATENT APPLICATION: US/10/510,506

TIME: 11:58:03

Input Set : A:\US10510506-seq list.txt

Output Set: N:\CRF4\10252005\J510506.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date